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BIRCH STEWART KOLASCH & BIRCH		EXAMINER		
PO BOX 747		GEBREMICHAEL, BRUK A		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/776,522	Applicant(s) MAKUTA, YOHEI
	Examiner BRUK A. GEBREMICHAEL	Art Unit 3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 17 March 2008.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-21 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-14 and 16-21 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 12 February 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/95/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____

5) Notice of Informal Patent Application

6) Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/17/2008 has been entered.
2. Currently, claims 1 and 16-19, are amended, and claim 15 is cancelled.

Response to Amendment

3. Applicant's amendment to claim 16 is sufficient to overcome the claim objection set forth in the previous office action. The Examiner respectfully withdraws the objection.

However, it is noted that currently presented claim 12 is labeled "currently amended" even though it appears to be the same as the previously presented claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 4, 6, 9, 10, 12-13 and 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caprai 6,251,015 in view of Ritchie 4,637,605.

Regarding claim 1, Caprai discloses, a display for displaying scenery viewable to the operator as a video image on the display, wherein the video image is simulated based on an operating condition designated by the operator through the operation of an operating condition simulating mechanism (see FIG 1), a steering handle mechanism capable of being gripped by the operator (FIG 3, label 56), a body for rotatably securing the steering handle mechanism (FIG 3, label 16) and a control unit (FIG 1, label 14).

However, Caprai fails to disclose the following claimed limitations: a pair of left and right main frames, a centrally located main frame, a pair of sub-frames connected to roughly central portions of the right and left main frames so as to extend toward a front side of the simulation system, and the control unit for the system being mounted between the pair of left and right main frames and under the centrally located main frame.

Ritchie teaches, a pair of left and right main frames, a centrally located main frame (see Examiner's annotated figure, FIG A which is based on FIG 1 of Ritchie's apparatus), a pair of sub-frames connected to roughly central portions of the right and left main frames so as to extend toward a front side of the simulation system (FIG A, label *Pair of sub-frames*), and a control unit for the system being mounted between the pair of left and right main frames and under the centrally located main frame (FIG 1, label 3 and also see FIG A regarding the Examiner's interpretation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by incorporating the apparatus of Ritchie in order to provide a more realistic riding or simulation experience to the user, as taught by Ritchie.

Caprai in view of Ritchie teaches the claimed limitations as discussed above. Caprai further discloses:

Regarding claim 3, a clutch lever and a brake lever (FIG 3, labels 72 and 76).

Regarding claim 4, a steering handle angle sensor for detecting a turning amount of a tip end portion of the stem member (col.4 lines 37-56 and FIG 5),

Regarding claim 6, the steering handle mechanism is formed in a cylindrical shape (FIG 3, label 56) and includes a throttle grip (FIG 3, label 68 and col.6, lines 65-67) for an accelerating operation of the motorcycle displayed on the display,

Regarding claim 9, the display being a display for a personal computer (see FIG 1),

Regarding claim 10, a casing being formed in a substantially box shape (see FIG 1, label 14).

However, with regard to claim 10, Caprai fails to positively disclose, a circuit substrate being disposed in an interior of the casing of the control unit, and a plurality of connection cables being connected to the circuit substrate through connectors.

Ritchie teaches, a circuit substrate (FIG 3, label 11) being disposed in an interior of the casing of a control unit (FIG 3, label 3), and a plurality of connection cables being connected to the circuit substrate through connectors (FIG 3, labels 15 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by placing a circuit element inside the casing in order to attach the rotating member(s) of the control unit directly with the control cables of the handlebar as taught by Ritchie (col. 3, lines 8-15 and FIG 1 labels 3, 15 and 17).

Regarding claims 12-13 and 16, Caprai in view of Ritchie teaches the claimed limitations as discussed above. Ritchie further teaches, the casing of the control unit is disposed between a first main frame and a second main frame (see FIG A below with the Examiner's interpretation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by placing the control unit between a pair of main frames in order to attach the rotating member(s) of the control unit directly with the control cables of the handlebar as taught by Ritchie (col. 3, lines 8-15 and FIG 1 labels 3, 15 and 17).

Further, providing plurality of flange portions on a unit in order to attach the unit to a supporting member was an obvious and known expedient at the time of the claimed invention.

Regarding claim 17, Caprai discloses the following claimed limitations, a display for displaying scenery viewable to the operator as a video image on the display, wherein said video image is simulated based on an operating condition designated by the operator through the operation of an operating condition simulating mechanism (FIG 1), a steering handle mechanism capable of being gripped by the operator (FIG 3, label 56), a riding

simulation apparatus adapted to be mounted on an elevated mounting surface (see FIG 1), a body for rotatably securing the steering handle mechanism (FIG 3, label 16) and a control unit (FIG 1, label 14).

However, Caprai fails to disclose, a pair of left and right main frames, a centrally located main frame, a pair of sub-frames connected to roughly central portions of the right and left main frames so as to extend toward a front side of the simulation system, and a control unit for the system being mounted between the pair of frames.

Ritchie teaches, a pair of left and right main frames, a centrally located main frame (see Examiner's annotated figure, FIG A which is based on FIG 1 of Ritchie's apparatus), a pair of sub-frames connected to roughly central portions of the right and left main frames so as to extend toward a front side of the simulation system (FIG A, label *Pair of sub-frames*), and a control unit for the system being mounted between the pair of frames (FIG 1, label 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by incorporating the apparatus of Ritchie in order to provide a more realistic riding or simulation experience to the user, as taught by Ritchie.

With regard to the limitation, *the pair of left and right main frames is adapted to be secured to one side of the elevated mounting surface, and the centrally located main frame is adapted to be secured to an opposite side of the elevated mounting surface*, it has been held that as long as the function of the apparatus remains the same, rearrangement of the same parts does not change the claimed limitations. *In re Seid*, 161 F.2d 229, 73 USPQ 431 (CCPA 1947) (Claim was directed to an advertising display

device comprising a bottle and a hollow member in the shape of a human figure from the waist up which was adapted to fit over and cover the neck of the bottle, wherein the hollow member and the bottle together give the impression of a human body. Appellant argued that certain limitations in the upper part of the body, including the arrangement of the arms, were not taught by the prior art. The court found that matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art).

Regarding claims 18 and 19, Caprai in view of Ritchie teaches the claimed limitations as discussed above. Ritchie further teaches, a forward end of the centrally located main frame is connected to forward ends of the sub-frames (see FIG A below with the Examiner's interpretation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by using a pair of sub-frames in order to further strengthen and stabilize the simulator, as taught by Ritchie.

Regarding claims 20 and 21, Caprai in view of Ritchie teaches the claimed limitations as discussed above. Ritchie further teaches, a cylinder portion for receiving a steering stem, and wherein each of the right, left, and centrally located main frames has an upper end connected to the cylindrical portion (see Appendix 1 below with the examiner's interpretation of FIG 10 of Ritchie's Patent).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by using a cylindrical member in order to rotatably secure the steering stem, as taught by Ritchie.

- Claims 2, 5, 7, 8, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caprai 6,251,015 in view of Ritchie 4,637,605 and further in view of Pittarelli 3,964,564.

Regarding claim 2, Caprai in view of Ritchie teaches the claimed limitations as discussed above. Caprai further discloses, the steering handle mechanism comprising a steering stem having a generally fan-shaped upper portion (FIG 3, label 42), an elongate steering handle being integrally held on the steering stem through a holder (FIG 3, labels 56 and 54), lever joint portions through which at least one of a clutch lever (FIG 3, label 76) and a brake lever (FIG 3, label 72) are held on the steering handle, and left and right grips (see FIG 3, label 60) which are mounted respectively to end portions of the steering handle.

However, Caprai in view of Ritchie fails to positively teach, lever joint portions through which at least one of a clutch lever and a brake lever are held on the steering handle.

Pittarelli teaches, lever joint portions through which at least one of a clutch lever and a brake lever are held on the steering handle (FIG 1 labels 141,142, 144 and col. 6, lines 53-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie and further in view of Pittarelli by using clamps in order to construct the joint portions in a way that the

operating levers will be swingable on the handlebar as taught by Pittarelli (FIG 1 labels 141,142, 144 and col. 6, lines 53-55).

Caprai in view of Ritchie and further in view of Pittarelli teaches the claimed limitations as discussed above. Caprai further discloses,

Regarding claim 5, a steering handle angle sensor for detecting a turning amount of a tip end portion of the stem member (col.4 lines 37-56 and FIG 5),

Regarding claims 7 and 8, the steering handle mechanism is formed in a cylindrical shape (FIG 3, label 56), and includes a throttle grip (FIG 3, label 68) for an accelerating operation of the motorcycle displayed on the display (col.6, lines 65-67),

Regarding claim 11, the control unit further including a casing being formed in a substantially box shape (FIG 1, label 14).

However, with regard to claim 11, Caprai fails to positively disclose, a circuit substrate being disposed in an interior of the casing, and a plurality of connection cables being connected to the circuit substrate through connectors.

Ritchie teaches, a circuit substrate (FIG 3, label 11) being disposed in an interior of the casing of a control unit (FIG 3, label 3), and a plurality of connection cables being connected to the circuit substrate through connectors (FIG 3, labels 15 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie in and further in view of Pittarelli by placing a circuit element inside the casing in order to attach the rotating member(s) of the control unit directly with the control cables of the handlebar as taught by Ritchie (col. 3, lines 8-15 and FIG 1 labels 3, 15 and 17).

Regarding claim 14, Caprai in view of Ritchie and further in view of Pittarelli teaches the claimed limitations as discussed above. Ritchie further teaches, the circuit substrate is disposed in the interior of the casing (FIG 3, label 3), the connectors are disposed at a lower end portion of the circuit substrate, and the connection cables are connected to the circuit substrate through the connectors (FIG 3, labels 15 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie and further in view of Pittarelli by placing a circuit element inside the casing in order to attach the rotating member(s) of the control unit directly with the control cables of the handlebar as taught by Ritchie (see col. 3, lines 8-15 and FIG 1 labels 3, 15 and 17).

Response to Arguments.

5. Applicant's arguments filled on 02/05/2008 have been fully considered. In the remarks, the Applicant argues that,

(1) First of all, it is difficult for the Applicant to understand how the Examiner can reasonably consider Ritchie to teach "control unit for said system being mounted between said pair of left and right main frames and under the centrally located main frame," as in claims 1 and 17 as previously presented.

On page 11 of the Office Action, the Examiner has annotated FIG. 1 of Ritchie, and alleges that control unit 3 (as shown in FIG. 1 of Ritchie) "is mounted between said pair control unit for said system being mounted between said pair of left and right main frames and under the centrally located main frame." The Applicant respectfully disagrees with the Examiner's position.

The Examiner is directed to enlarged, detailed versions (FIGS. 4, 9, and 10) of the Ritchie device as shown in high-level FIG. 1. It is evident from each of Ritchie's FIGS. 1, 4, 9, and 10, that control unit 3 is NOT mounted between the pair of main frames as the Examiner alleges. As can be seen in the Examiner's annotated FIG. 1 of Ritchie on page 11 of the Office Action (and also FIGS. 4, 9, and 10, which are enlarged views of FIG. 1), the control unit 3 is forward of the downward extending pipes (called right and left main frames by the Examiner).

As the Examiner is fully aware, the Examiner must consider a prior art reference as a whole when making a rejection, and is forbidden from randomly citing selected portions of a reference without considering the context of the entire reference. Specifically, regarding the present application, which the Examiner has rejected based on Ritchie, it is certainly not proper for the Examiner to selectively use the high level drawing of Ritchie's FIG. 1, while ignoring Ritchie FIGS. 4, 9, and 10, each of which explicitly conflicts with the Examiner's allegations about the structure of the Ritchie device. Thus the Examiner's rejection of claims 1 and 17 as previously presented is not proper.

(2) Secondary, as previously set forth in each of claims 18 and 19, and as now set forth in each of independent claims 1 and 17, FIGS. 1 and 4 of the present invention explicitly illustrate subframes 54a, 54b connected to roughly central portions of the right and left main frames 52a, 52b so as to extend toward a front side of the simulation system 10.

However, on page 6 of the Office Action, in the rejection of claim 18 and 19, the Examiner asserts that Ritchie teaches "a pair of sub-frames connected to roughly central portions of the right and left main frames so as to extend toward a front side of the simulation system." This is not the case; they extend away from the front side of the simulation unit.

Further, pipes (called sub-frames by the Examiner) merely extend rearwardly (rather than forwardly) from a position near upper parts (rather than being connected to central portions) of the downward extending pipes.

Thus, Ritchie cannot possibly teach or suggest "a pair of sub-frames connected to roughly central portions of the right and left main frames so as to extend toward a front side of the simulation system", as set forth in claims 1 and 17 of the present invention.

Further, as the Examiner concedes, Caprai cannot make up for the above deficiencies of Ritchie to reject claims 1 and 17 of the present invention.

At least for the reasons explained above, the Applicant respectfully submits that the combination of elements as set forth in each of independent claims 1 and 17 is not disclosed or made obvious by the prior art of record, including Caprai and Ritchie.

- In Response to Argument (1), the Examiner respectfully disagrees. As already indicated in the previous office actions, and also in this office action, the prior art is considered as a whole. In addition, with regard to FIG 1, whether this figure is a selected portion or not, as long as it teaches or suggests Applicant's claimed feature it can be used. The Examiner doesn't see any rational why he should disregard this figure from applying it only because it is a *high level drawing of Ritchie's device*, as the

Applicant indicated in the above argument. Further, even if the Applicant assumed that the Examiner has ignored FIGURES 4, 9 and 10, the Examiner didn't ignore any of the figures in the disclosure as these figures show parts of the Ritchie's apparatus and the alternative arrangements for operating the control cables 15 and 17 (col.3, lines 62-67).

Further, it has been held that when the general conditions of the claimed feature is already taught or suggested in the prior art, rearrangement of the parts of the invention involves only a routine skill in the art. *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) (Claims to a hydraulic power press which read on the prior art except with regard to the position of the starting switch were held unpatentable because shifting the position of the starting switch would not have modified the operation of the device.).

Therefore, the Examiner concludes that for the reasons stated above and also in views of the prior arts, Applicant's claimed invention would have been obvious to one of ordinary skill in the art at the time of the invention was made.

In response to Argument (2), the Examiner respectfully disagrees. It appears that Applicant's argument is directed to narrow interpretation of the claims referring to the drawings of the current application (FIG 1 and 4, labels 54a and 54b). However, the Examiner gave the broadest interpretation to the claimed features, and observed that FIG 1 of Ritchie's invention clearly teaches the claimed limitation, "a pair of sub-frames connected to roughly central portions of the right and left main frames so as to extend toward a front side of the simulation system." Therefore, the Examiner maintains that, Capra's invention in view of Ritchie's invention does teach and suggest the above

claimed invention. Please refer to FIG A and Appendix 1 for more detail regarding the Examiner's interpretations.

It is also noted that (based on the above argument) the Applicant assumed the frames of Ritchie's apparatus are pipes even though nowhere in Ritchie's disclosure the frames are taught as pipes. Of course, even if they are pipes, they are still frames that form the structure of the bike apparatus.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruk A. Gebremichael whose telephone number is (571) 270-3079. The examiner can normally be reached on Monday to Friday (7:30AM-5:00PM) ALT. Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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